

What is claimed is:

1. A semiconductor photosensor device which outputs a detection result when a trigger signal is inputted, comprising:
  - a photodiode current arithmetic circuit which is in an operating state regardless of whether before or after the input of the trigger signal, and which outputs a photocurrent generated by light irradiation;
  - a first amplifier which is in an operating state regardless of whether before or after the input of the trigger signal, and which amplifies and outputs the output of the photodiode current arithmetic circuit; and
  - a second amplifier which is in a non-operating state before the input of the trigger signal, wherein the second amplifier shifts to an operating state upon receiving the trigger signal, and amplifies and outputs the output of the first amplifier.
2. The semiconductor photosensor device according to claim 1, wherein
  - a first power supply voltage is supplied to the photodiode current arithmetic circuit regardless of whether before or after the input of the trigger signal,
  - a second power supply voltage is supplied to the first amplifier regardless of whether before or after the input of the trigger signal, and
  - a third power supply voltage is supplied to the second amplifier upon receiving the trigger signal.
3. The semiconductor photosensor device according to claim 2, wherein the first power supply voltage and the second power supply voltage are the same voltage.
4. The semiconductor photosensor device according to claim 2, wherein the first power supply voltage, the second power supply voltage, and the third power supply voltage are the same voltage.

5. The semiconductor photosensor device according to claim 2, wherein

a first power supply potential and a second power supply potential are supplied to the photodiode current arithmetic circuit regardless of whether before or after the input of the trigger signal,

the first power supply potential and a third power supply potential are supplied to the first amplifier regardless of whether before or after the input of the trigger signal, and

the first power supply potential is supplied to the second amplifier regardless of before or after the input of the trigger signal and a fourth power supply potential is supplied thereto upon receiving the trigger signal.

6. The semiconductor photosensor device according to claim 5, wherein the first power supply potential is a ground potential.

7. The semiconductor photosensor device according to claim 5, wherein the first power supply potential is a positive potential, and the second power supply potential is a ground potential.

8. The semiconductor photosensor device according to claim 7, wherein the third power supply potential is the ground potential.

9. The semiconductor photosensor device according to claim 8, wherein the fourth power supply potential is the ground potential.

10. The semiconductor photosensor device according to claim 1, wherein

a first power supply potential is supplied to the photodiode current arithmetic circuit, the first amplifier, and the second amplifier, respectively,

the photodiode current arithmetic circuit and the first amplifier are connected to a first terminal to which a second power supply potential is supplied regardless of whether before or after the input of the trigger signal, and

the second amplifier is connected to the first terminal via a switching circuit.

11. The semiconductor photosensor device according to claim 10, wherein the switching circuit switches an ON state upon receiving the trigger signal.

12. The semiconductor photosensor device according to claim 11, wherein the first power supply potential is a ground potential.

13. The semiconductor photosensor device according to claim 1, wherein

a first power supply potential is supplied to the photodiode current arithmetic circuit, the first amplifier, and the second amplifier, respectively,

the photodiode current arithmetic circuit and the first amplifier are connected to a first terminal to which a second power supply potential is supplied regardless of whether before or after the input of the trigger signal,

the second amplifier is connected to a second terminal to which a third power supply potential is supplied upon receiving the trigger signal, and

a current which flows from the second terminal into the second amplifier is used as an output current of the semiconductor photosensor device.

14. The semiconductor photosensor device according to claim 13, wherein the third power supply potential is supplied to the second terminal via a resistance.

15. The semiconductor photosensor device according to claim 13, wherein the first power supply potential is a ground potential.

16. A portable terminal unit, comprising: ✓

a trigger generator which generates a trigger signal based on an operation from outside; and

a semiconductor photosensor device which outputs a detection result when the trigger signal is inputted, wherein the semiconductor photosensor device comprises:

a photodiode current arithmetic circuit which is in an operating state regardless of whether before or after the input of the trigger signal, and which outputs a photocurrent generated by light irradiation;

a first amplifier which is in an operating state regardless of whether before or after the input of the trigger signal, and which amplifies and outputs the output of the photodiode current arithmetic circuit; and

a second amplifier which shifts to an operating state upon receiving the trigger signal, and which amplifies and outputs the output of the first amplifier.

17. The portable terminal unit according to claim 16, further comprising:

a light emitting element whose brightness is adjusted according to the detection result.

18. The portable terminal unit according to claim 16, further comprising a key operation section, wherein the trigger signal is generated by the key operation section being operated from outside.

19. The portable terminal unit according to claim 16, further comprising:

a main body including a key operation section; and  
a cover which brings the key operation section to a state capable of being operated from outside by being opened, wherein the trigger signal is generated by the cover being opened.